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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,545	03/08/2006	James C. LeBlanc Sr	21291	1421
77176	7590	10/08/2008		
Novak, Druce & Quigg LLP			EXAMINER	
1300 I Street, N.W.			CULBRETH, ERIC D	
Suite 1000, West Tower				
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			3616	
			MAIL DATE	DELIVERY MODE
			10/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,545

Applicant(s)

LEBLANC SR ET AL.

Examiner

Eric Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 2/14/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the details of valve 105 in Figure 9 (note page 9) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Contrary to page 4, lines 6-7 there are five sets of wheels shown, not four.
- b. Reference numerals 28a and 28b (page 4, line 17) are not on the drawings.
- c. In Figure 6 the same part is labeled rim portion 35 and knuckle plate 40 (page 5, lines 2-7 and 15-16)(the lead line for reference numeral 40 in Figure 6 is wrong; note Figure 7).
- d. Reference numerals 58 and 59 (page 5, line 20) are not on the drawings.

e. Reference numeral 40a refers to both a plate and an opening (page 6, line 12; page 7, line 6 and the remainder of the specification); a reference numeral should only refer to one part of the invention.

f. Reference numeral 51b (page 7, line 15) is not on the drawings.

g. Reference numeral 26a does not refer to a shaft in Figure 9a (page 7, line 16).

h. Reference numeral 26a is not in Figure 9 (page 7, line 16).

i. Reference numeral 90 refers to different parts of the invention (Figure 5 vs. Figure 6 vs. Figure 11; page 7, line 9 from the end of the page); a reference numeral should refer to only one part of the invention, and the drawings and specification should be carefully reviewed and corrected.

j. Reference numeral 15 (page 8, line 12) is not on the drawings.

k. Reference numeral 26a refers to a flange at page 8, line 17 and referred to a shaft at page 7, line 16.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cylindrical rollers (claims 2 and 24), ball joint connections (claims 8 and 41), set of seals (claim 10), source of pressure (claim 9), means for providing regulated amounts of air (claim 22), power plant (claim 23), gearbox (claim 49), aligned shafts (claim 51) and differential gear assembly (claim 52) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no support for claim 8 (ball joint connections) nor claim 52.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 9-10, 22, 42 and claim 64 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The passageway intercommunicating air to the tire is not disclosed in an enabling manner because of the lack of details regarding the valve. Similarly, the means providing regulated amounts of air is not disclosed in an enabling manner (claim 22).

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-22, 46 and 53-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- In claim 1 there is no antecedent basis for "the rotational axis" (line 6).
 - Claim 3 would not appear to be accurate.
 - In claim 8, line 1 there is no clear antecedent basis for "the connections".
 - In claim 9, line 2 "an pressure" should be "a pressure".

- e. In claim 10, line 1 "which" should follow "seals" to make a complete sentence.
- f. In claim 18, line 2 it is not accurate to recite the shock absorber having an end connected to the bracket.
- g. In claim 20, line 7 it is not accurate to recite the shock absorber connected to the bracket.
- h. In claim 21, it is not accurate to recite a telescoping member.
- i. In claim 46 there is no antecedent basis for "said air spring".
- j. Claim 53 has no limitations.
- k. In claim 54, line 1 "may be" fails to positively recite structure (anything "may be" done).
- l. Also in claim 54, lines 1-2 it is inaccurate to state the wheel unit [is] incorporated into a body to form a vehicle.
- m. In claim 54 there is no antecedent basis for "said housing".
- n. In claim 55, it is not clear what the third shaft is.
- o. In claim 58, line 2 "a" should precede "universal".
- .

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 4-8, 14-15, 23, 26, 28-35, 41, 45-46, 49, 51-55, 58-59, 62-63 and 65 as best understood are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dangel et al US004372418, cited by applicant.

11. Claims 1-2, 5-7, 23-24, 26, 28-32, 35, 49 and 53 as best understood are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yoshida US004172621, cited by applicant.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 11-13, 27, 36-40, 43-44, 57, 60-61 and 66 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Schmitz et al US005538274A, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al to include the lower control arm being a panel as taught by Schmitz et al's panel 56 in order to provide a stronger control arm for off road conditions, as the panel arm would yield predictable results (a stronger arm). Although the arm 56 is trapezoidal, to make the arm triangular would involve an obvious matter of design choice, as the specification attaches no criticality to the specific shape of the arm and the arm would appear to work the same whether is it trapezoidal or more triangular. Similarly, in the combination Schmitz et al's arm 56 is angled in Figure 2, and making the arm curved would be an obvious design choice given the lack of showing of criticality of the specific shape. Also in Figure 2 of Schmitz et al in the combination the joint at 117 of the two illustrated universal joints at the outer end of the axle 120 is in the rim portion of the wheel. The features of claims 37-40 are taught by Dangel et al, the primary reference. Also in the combination, Schmitz et al teaches vertical braces 42, 43 and plates for lower panel 56 that are longitudinally spaced and transversely disposed and bear the upper and lower control arms pivotally (claim 57).

15. Claims 16-17 and 47-48 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Riese US004974872, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al to include an air spring between the vehicle body and a bracket on the upper control arm as taught by Riese in Figure 1 where air spring 39 is between body 43 and bracket 34 in order to control the suspension (Riese, column 2, lines 6-12).

16. Claim 42 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Skoff et al US006575269B1 (cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al as best understood to include a passageway through the first and second support means so that air can be introduced into the tire as taught by Skoff et al's passages 9, 10 in order to inflate the tire.

17. Claims 50 and 56 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangel et al in view of Schoepe et al US003476200, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dangel et al to include disc brakes on the output shaft

adjacent the differential as taught by Schoepe et al's brake discs 42 in order to make the suspensions interchangeable (Shoepe et al, column 3, lines 69-75).

18. Claims 3 and 25 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida.

The angle of the raceways is an obvious matter of design choice, absent some showing of criticality, as the specification gives no stated reason or particular purpose for the angles being 45 degrees and 90 degrees to each other, and the invention would appear to work just as well with Yoshida's angles.

Allowable Subject Matter

19. Claims 9-10, 18-19, 21-22 and 64 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

20. Claim 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
Art Unit 3616

/Eric Culbreth/
Primary Examiner, Art Unit 3616

Application Number**Application/Control No.**

10/524,545

**Applicant(s)/Patent under
Reexamination**

LEBLANC SR ET AL.

Examiner

Eric Culbreth

Art Unit

3616